II. REMARKS

A. Introduction

The Examiner's prior Office action mailed July 17, 2002 ("Prior Office action") rejected all of applicants' claims under 35 U.S.C. § 112, first paragraph, for lack of written description support. The Prior Office action also rejected applicants' claim of priority under § 120 to the filing date of applicants' parent application for all of the pending claims and applied numerous intervening references against applicants pending claims.

In response to these rejections, applicants explained in detail their position, and the legal bases thereof, regarding their compliance with §§ 112 and 120. See applicants' January 9, 2003 Amendment and Request for Reconsideration ("January 2003 Response"). Applicants also submitted an expert declaration of Dr. George T. Ligler demonstrating how each and every claim, as amended, was supported under the requirements of § 112, first paragraph, in both applicants' 1981 and 1987 specifications.

In the Office action, the Examiner has withdrawn all of the § 112, first paragraph, rejections asserted in the Prior Office action, and the Examiner makes no new § 112, first paragraph, rejections in the instant Office action. Accordingly, applicants have effectively overcome the § 112, first paragraph, rejections asserted in the Prior Office action, and applicants understand that the Examiner does not object to applicants' position that each and every pending claim is fully supported under § 112, first paragraph, by applicants' instant 1987 specification.

In the Office action, the Examiner also has withdrawn all of the rejections asserted in the Prior Office action based on intervening references under 35 U.S.C. §§ 102 and 103. Further, the Examiner makes no new rejections based on intervening references under 35 U.S.C. §§ 102 or 103 in the instant Office action. Accordingly, applicants have effectively overcome the §§ 102 and 103 rejections based on the intervening references applied in the Prior Office action.

As there are no outstanding rejections based on: (1) intervening references under 35 U.S.C. §§ 102 or 103; or (2) or § 112, first paragraph, the Examiner and applicants agree that the

issue of whether applicants' claims are entitled to priority under § 120 is moot in this application. See Office action p. 57 ("The examiner understands that applicants' claim to the 1981 priority date needs only be addressed and resolved for those claims which are properly rejected under sections 102 and 103 via intervening prior art. Thus when applicant elects to amend the claims to overcome the intervening prior art, the section 120 priority issue becomes moot.").

B. Response To The Examiner's Discussion Of § 120 Issues

Notwithstanding the fact that the Examiner and applicants agree that the § 120 issue is now moot with respect to this application, several sections of the Office action are devoted to a discussion of the § 120 priority issues. See Office action Sections A, B, D, E1, and Appendices I-V. These sections are improper. Applicants' prior responses have thoroughly addressed the requirements of § 120, which provide that "[a] claim in a CIP application is entitled to the filing date of the parent application when the *claimed* invention is described in the parent specification in a manner that satisfies, inter alia, the description requirement of 35 U.S.C. § 112." Therma-Tru Corp. v. Peachtree Doors Inc., 44 F.3d 988, 992, 33 U.S.P.Q.2d 1274, 1276 (Fed. Cir. 1995) (emphasis added). The dozens of pages in the Office action discussing the § 120 priority issue are devoid of any analysis regarding whether any particular claim in this application is described in the parent specification in a manner that satisfies the first paragraph of 35 U.S.C. § 112. In contrast, applicants have provided such a claim-by-claim analysis by way of the expert declaration of Dr. George T. Ligler ("Ligler declaration") filed with the January 2003 Response. The Office action does not contest the substance of the Ligler declaration, with the exception of a single issue that is not the subject of any claim pending in the instant application. See Office action Section D-1 at 40, Ligler dec. ¶ 49. As the Office action does not contest the substance of the Ligler declaration (except for the one issue unrelated to the pending claims) and applies no intervening prior art, the lengthy discussion of the priority issue is improperly included in the Office action.

In the Office action, the Examiner has asked for clarification regarding "what 'standard' of proof applicants and applicants' expert have adopted in support of their conclusions." Office action at 56. It appears that the Examiner is again questioning what standard 35 U.S.C. § 120 imposes for an applicant to obtain the benefit of the filing date of an earlier filed application. Applicants respectfully direct the Examiner's attention to applicants' January 2003 Response, which thoroughly sets forth the standard the law imposes. In summary:

Assuming the common inventorship, copendency, and cross-reference required by section 120, that section further requires only that the invention be disclosed in the parent application in such manner as to comply with the first paragraph of section 112 and be the same invention as that disclosed in the later application. It does not require that the invention be described in the same way, or comply with section 112 in the same way, in both applications.

In re Kirchner, 305 F.2d 897, 904, 134 U.S.P.Q. 324, 330 (C.C.P.A. 1962). The Ligler declaration demonstrates that applicants' invention as set forth by each claim is disclosed in the 1987 specification and is disclosed in the 1981 specification in such manner as to comply with the first paragraph of § 112. Upon reading both specifications and the pending claims, Dr. Ligler has identified disclosure in both specifications that supports applicants' invention as set forth by each pending claim. Based on this analysis, Dr. Ligler concludes that the subject matter of each pending claim is disclosed in sufficient detail, in both the 1981 and 1987 specifications, such that a person of ordinary skill in the relevant time frames would reasonably understand that applicants possessed that subject matter at the time of the filing of the specifications.

As the § 120 issue is now moot, applicants do not further respond to the protracted, non-claim specific discussion of these issues presented in the Office action. The fact that applicants have elected not to respond to the Examiner's discussion of hypothetical examples and matters related to the moot § 120 priority issue should not be interpreted as applicants having conceded any point, assertion, or argument respecting the § 120 priority issues. Instead, applicants simply believe that their January 2003 Response, in addition their previous submissions addressing these

issues, accurately and completely express and explain their position with respect to these issues. Applicants reserve their right to fully address and respond to any argument, assertion or issue contained in Sections A, B, D, E1, and Appendices I-V of the Office action, if and when any such issue, argument or assertion becomes relevant.

C. Response To Appendix VI

In Appendix VI of the Office action, the Examiner repeats a list of more than 30 "Examples"/"Issues" all of which, except number 33, were included in prior Office actions. The "Examples"/"Issues" discuss miscellaneous issues arguably related to §§ 112 and 120. This is the third time in which the vast majority of these "Examples"/"Issues" have appeared in an Office action in this application. In the Prior Office action, the Examiner stated that the list of "Examples" would be maintained by the Patent Office in all of applicants' related applications "in an attempt to ensure consistency in the way that these issues are handled between applications in the future." Prior Office action, p. 56. Notwithstanding the Examiner's attempt to ensure consistency, the list of Examples is an ever-changing "list" with numerous additions, deletions, and other changes appearing over time. It appears that the only "entirely" new "Example"/"Issue" is number 33. While the Examiner has taken time to correct minor grammatical errors and make substantive revisions to many of these "Examples"/"Issues," the Examiner has not commented on, or even acknowledged, applicants' prior responses to the "Examples"/"Issues."

¹ For example, prior to the Office actions received in 2004 in the instant application and application serial number 08/487,526, the most recent "List of Examples" appeared in the Office action mailed on July 30, 2003 in application serial number 08/444,788. While many of the changes between the list appearing in the Office action mailed on July 30, 2003 and the instant Office action are trivial and grammatical corrections, the Examiner has deleted several "Examples" (e.g., "Examples 22, 24, and 26 have been removed) and inserted substantive additions to others.

Applicants have previously responded to all but one of the 33 "Examples"/"Issues," and continue to believe that all of these "Examples"/"Issues" should be withdrawn in their entirety. The relevance of the "Examples"/"Issues" is questionable — especially now that the Examiner and applicants agree that the § 120 priority issue is moot. Applicants reserve their right to further address any issue raised in the "Examples"/"Issues" if the Examiner makes an actual rejection or objection based on any of the issues raised in the "Examples"/"Issues."

Regarding Example 33, the Examiner addresses applicants' arguments from the Response filed January 9, 2003, in the instant application regarding a specific rejection in the prior Office action. The Examiner withdrew this rejection in the instant Office action. Applicants maintain that the claimed invention is patentable over the references cited by the Examiner. Applicants fully set forth below the distinctions between the claimed invention and the applied art related to viewdata for each claim rejection that is asserted by the Examiner.

D. Response To Rejections Under Section 112, Second Paragraph

In Section E2 (I), the Examiner rejects claims 56, 80, 84, and all claims dependent therefrom under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner rejects applicants' use of the term "locally generated." The Examiner's discussion of applicants' use of the term "locally generated," however, fails to set forth a proper rejection under § 112, second paragraph.

In Section E2, the Examiner states that the term "locally generated" is indefinite because the Examiner thinks it means one thing and applicants have allegedly said the term means something else. Stated another way, the Examiner asserts that he understands that teletext images are locally generated, while applicants allegedly assert that teletext images are not locally generated. Even if the Examiner's interpretation was the correct one (which it is not, as explained below), the Examiner fails to articulate a sufficient basis to reject the relevant claims

² See, e.g., applicants' January 2003 Response filed in the instant application and applicants' January 30, 2004 Response filed in application serial number 08/444,788.

under 35 U.S.C. § 112, second paragraph. The Examiner provides no reason or analysis as to why applicants' use of the term renders the relevant claims indefinite.

The Examiner is required to give the claim terms their broadest reasonable interpretation during examination. See In Re American Acad. Of Science Tech Ctr., No. 03-1531, 2004 WL 1067528 (Fed. Cir. May 13, 2004). Given the broadest reasonable interpretation of "locally generated," the Examiner's assertion that applicants and the Examiner allegedly disagree as to whether prior art teletext systems locally generate teletext images does not render applicants claims indefinite under 35 U.S.C. § 112, second, paragraph. Given a broad interpretation of the claim term, any disagreement over what the prior art does or does not disclose is germane to a rejection under 35 U.S.C. § § 102 or 103 — not § 112, second paragraph.

Additionally, the Examiner's characterization of applicants' position is not accurate. Applicants have consistently argued that all of applicants' claims are distinguishable over the prior art teletext systems. Claims 56, 80 and 84 set forth that the locally generated image is based on user specific data. Applicants have also asserted that teletext images are not "locally generated" images as defined in these claims -- teletext is not based on user specific data.³

Nothing about applicants' position on this issue renders the term "locally generated" indefinite.

In Sections E2 (II) and (III), the Examiner rejects claims 80, 84, and the claims dependent therefrom as being "indefinite and confusing" because it is not clear whether certain functional descriptions set forth in the claims are part of the recited method or whether the functional descriptions should be treated merely as descriptions of intended use.

Applicants note that the Examiner raised this identical objection with respect to claims 80 and 84 in the Prior Office action and applicants have already fully responded to the Examiner's objections. *See* January 2003 Response, p. 85. Regarding the Examiner's request for clarification as to whether the functional description set forth in the claims are part of the recited

³ See Section II.E addressing the absence of user specific data from the prior art teletext references.

method or whether the functional descriptions should be treated merely as descriptions of intended use, applicants maintain that functional descriptions are not steps of the methods recited in claims 80 and 84. Instead, the claim language in question is simply a functional description of the signal recited in the claims. Applicants note such a functional description of a claimed feature is entirely proper and does not render the claims indefinite under § 112, second paragraph. M.P.E.P. § 2173.05(g).

In Section E3 of the Office action, the Examiner raises a question concerning applicants' recitation of processing steps in which information from a first discrete signal is organized "with" information from a second discrete signal in claims 65, 84, 93 and 187. Applicants note that the Examiner's discussion of applicants' use of the term "with" does not form the basis of a rejection of these claims under § 112, second paragraph. The Examiner interprets these recitations to refer to a process in which the information from the first discreet signal and the information from the second discreet signal are organized along with each other. Applicants do not object to this interpretation of the term "with" as it is consistent with the specification. For example, the specification at pages 29-30 describes that decoders, 30 and 40, detect signal information embedded in respective television and radio frequencies, render the information into digital signals and output the signals to buffer/comparator, 8. "Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information." Spec. p. 30, Il. 7-9. Applicants disagree with the Examiner's assertion that this interpretation is met by conventional teletext decoders, as conventional teletext decoders do not organize incoming packets as asserted by the Office action. Applicants address below this failure of the relied upon teletext references in response to the applicable prior art rejection.

E. Response To Prior Art Rejections

Before turning to the specific claim rejections under 35 U.S.C. § § 102 and 103, applicants wish to address a claim interpretation error that is repeated by the Examiner throughout the Office action. In particular, the Examiner has erroneously construed the term

"user specific data" (and it variants "user specific datum," "data specific to a user," and "user specific subscriber datum") in a manner that invites rejections based on references that simply disclose user selection of an option from a list of available choices. For example, many of the rejections are based on teletext references, with the Examiner taking the position that the user's input of a teletext page number constitutes "user specific data." For the reasons set forth below, these rejections are based on an *unreasonable* interpretation of "user specific data," and should therefore be withdrawn.

The term "user specific data" should properly be construed to mean data that relates to a particular receiver station or to the users or users of that receiver station, and which may be, but does not necessarily have to be, unique to that particular station or users.⁴ This definition of "user specific data" is derived from the plain meaning of the word "specific" and is consistent with the specification.

MPEP § 2111 clearly sets forth the manner by which the Examiner should interpret claims during examination. Specifically, the pending claims must be "given their broadest reasonable interpretation consistent with the specification." In re Hyatt, 211 F.3d 1367, 1372, 54 U.S.P.Q.2d 1664, 1667 (Fed. Cir. 2000) (emphasis added). This means that the words of the claim must be given their plain meaning unless applicants have provided a clear definition in the specification. Id.; Chef America, Inc. v. Lamb-Weston, Inc., 358 F.3d 1371, 1372, 69 U.S.P.Q.2d 1857 (Fed. Cir. 2004). The MPEP further points out that "plain meaning" refers to the ordinary and customary meaning given to the term by those of ordinary skill in the art. Sunrace Roots Enter. Co. v. SRAM Corp., 336 F.3d 1298, 1302, 67 U.S.P.Q.2d 1438, 1441 (Fed. Cir. 2003); Brookhill-Wilk 1, LLC v. Intuitive Surgical, Inc., 334 F.3d 1294, 1298 67 U.S.P.Q.2d 1132, 1136 (Fed. Cir. 2003). The ordinary and customary meaning of a term may be evidenced from a

⁴ PMC, the owner of this application and the related issued patents, has taken a similar position with regard to the proper construction of the term "user specific signals" in the United States District Court for the Northern District of Georgia, Atlanta Division, in the litigation styled *Personalized Media Communications, L.L.C. v. Scientific-Atlanta, Inc. and PowerTV, Inc.*, C.A. No. 1:02-CV-824 (CAP).

variety of sources, including dictionaries. *Texas Digital Sys., Inc. v. Telegenix, Inc.*, 308 F.3d 1193, 1202, 64 U.S.P.Q.2d 1812, 1818 (Fed. Cir. 2002).

Applying this procedure to the claim term "user specific data," an appropriate place to start is with the definition of "specific." American Heritage Dictionary (1979) defines "specific" as follows:

spe•cif•ic \spə-sif'ik\ adj. Abbr. sp. 1. Explicitly set forth; particular; definite. 2. Pertaining to, characterizing, or distinguishing a species. 3. Special, distinctive, or unique, as a quality or attribute. 4. Intended for, applying to, or acting upon a particular thing. 5. Denoting a disease produced by a particular microorganism or condition. 6. a. Denoting a customs charge levied upon merchandise by unit or weight rather than according to value. b. Denoting a commodity rate applicable to the transportation of a single commodity between named points.

—n. 1. Something specific, such as a quality, statement, attribute, or the like. 2. A remedy intended for some particular ailment or disorder. [Medieval Latin specificus, from Latin speciēs, kind, SPECIES.] —spe•cifi•cal•ly adv. — spec'i•fic'i•ty (spěs'ə-fis'ə-tē) n.

The MPEP provides guidance on what to do when there are several definitions for a term. Specifically, the intrinsic record must be consulted to identify which of the different possible definitions is most consistent with applicants' use of the term. *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250, 48 U.S.P.Q.2d 1117, 1122 (Fed. Cir. 1998).

Applicants' specification sets forth systems and methods for the generation of user specific information at a plurality of subscriber stations. Spec. p. 11, ll. 23-27. An example of this is the generation of a graph of the user's stock portfolio performance based on information on the portfolio of financial instruments owned by that user. Spec. pp. 19-28, esp. p. 21, ll. 5-14.

Given this background, the logical choice for the definition of "specific" in this context is "intended for, applying to, or acting upon a particular thing." The context is the transmission of data used for outputting a video presentation at a receiver station. Accordingly, the term "user specific data" means data that relates to a *particular* receiver station or the user or users of that receiver station. This definition correlates well with what is disclosed in the specification, in that

the stock portfolio data upon which the graph is based relates to the particular user of the receiver station -- i.e., the user of the claimed methods.

The stock portfolio data apply to the particular user of the receiver station. The stock portfolio data may be unique to the user (e.g., where no other users have the same portfolio), but do not necessarily have to be unique to the particular station or user (e.g., where another user happens to have the exact same portfolio). However, in every case, each receiver station uses data that is intended for and applies to the particular user or users of that receiver station. The receiver stations are not using data that are universally applicable to other users.

The prior art rejections in the Office action strongly suggest that the Examiner has construed the term "user specific data" to simply mean, or to be broad enough to encompass, "user input of a selection from a list of available options." As properly construed, there is nothing "user specific" about a page number entered by a user in a teletext system. All users of a given teletext system would enter the *same* page number to get the *same* teletext page. No page number can possibly be unique to a user. No page number is intended for a particular user. To the contrary, the page numbers are available universally such that different users may obtain identical teletext pages. For at least this reason, all rejections premised on the notion that such user input constitutes "user specific data" should be withdrawn.

Applicants also note that at various points in Office action, the Examiner refers to documents that are not specifically relied upon in rejecting or objecting to any particular claim (see, e.g., Sections C, D and Appendix VII of the Office action). In the interests of brevity and clarity, applicants have not addressed the Examiner's various representations and assertions regarding those documents. Of course, applicants will fully address any such documents in the instant application or in any of applicants' copending applications, including the issue of whether or not such documents qualify as prior art, if they are ever relied upon in a formal rejection or objection to any pending claim, and applicants hereby expressly reserve the right to do so.

F. Response To Prior Art Rejections Under § 102

In Sections E4-E9, the Examiner rejects claims 56-58, 60-63, 65, 66, 67-72, 74, 93-95, 100, 102, 103, 106-109, 187-189, and 191-197 under 35 U.S.C. § 102(b) as being anticipated by Japanese published application no. 55-028691 listing Kenzou Oono et al. as inventors ("Oono") (references to Oono refer to the English translation by FLS, Inc. provided by the Office and dated March 1997). Under 35 U.S.C. § 102, the Office bears the burden of presenting at least a prima facie case of anticipation. Chester v. Miller, 906 F.2d 1574, 15 U.S.P.Q.2d 1333 (Fed. Cir. 1990). Anticipation requires that a prior art reference disclose, either expressly or under the principles of inherency, each and every element of the claimed invention. See e.g., Kloster Speedsteel AB v. Crucible, Inc., 793 F.2d 1565, 1571, 230 U.S.P.Q. 81, 84 (Fed. Cir. 1986) ("[A]bsence from the reference of any claimed element negates anticipation."). "In addition, the prior art reference must be enabling." Akzo N.V. v. U.S. Int'l Trade Comm'n, 808 F.2d 1471, 1479, 1 U.S.P.O.2d 1241, 1245 (Fed. Cir. 1986). That is, the prior art reference must sufficiently describe the claimed invention so as to have placed the public in possession of it. In re Donohue, 766 F.2d 531, 226 U.S.P.Q. 619 (Fed. Cir. 1985). "Such possession is effected if one of ordinary skill in the art could have combined the publication's description of the invention with his own knowledge to make the claimed invention." Id.

1. Oono Applied Against Claim 187 And Claims Depending From 187

In Section E4, the Examiner asserts that Oono anticipates claim 187 under § 102(b). Oono is a video game software reference. Oono relates to a television receiver with a programmable processor. Software or picture data may be superimposed on a video signal and transmitted to a home. A telephone modem is described for establishing a connection to a broadcasting station. The receiver includes a receiver, a data pickup circuit, a microcomputer, video RAM, a switch, and a circuit in which the output of the video RAM and external video are superimposed. In one mode of operation, Oono describes data to be superimposed. In this mode, data addressed to the receiver is stored in memory and written to the video RAM. The

switch is set to input V_2 to accept input from a circuit in which the picture from the video RAM and the video signal of an external signal are superimposed.

In order to anticipate claim 187, Oono must disclose each and every element recited in claim 187. Claim 187 requires "organizing information included in said at least one first discrete signal with information included in said second discrete signal to provide an organized signal at the receiver station." Claim 187 also sets forth generation of an image "by processing at least one user specific subscriber datum . . . supplied by a user." Further, the user specific subscriber datum must be "stored at the receiver station prior to" organizing the information in the first discrete signal with the information in the second discrete signal. Applicants maintain that the Examiner has not made out a *prima facie* case of anticipation under § 102(b) because the Examiner fails to sufficiently explain how the system described in Oono discloses each and every element of claim 187. For example, Oono fails to teach at least one user specific subscriber datum for the reasons set forth in Section E above.

Oono fails to teach a step of organizing. The Examiner asserts that this is an implicit feature of videotext transmission, in that the text transmission is conveyed as multiple packets embedded in the vertical blanking interval of the television signal. Thus, the Examiner asserts that RAM (4) is for organizing information from multiple packets. In applicants' invention, "signals may convey information in discrete words, transmitted at separate times or in separate locations, that the receiver apparatus must assemble in order to receive one complete instruction." Spec. p. 14, Il. 22-25. As the discrete words may be transmitted at various and varying locations, the mere detection of the signal words is insufficient to give meaning to the signal. These signals must be organized into units, such as instructions. Spec. p. 14, Il. 26 - p. 15, I. 6. This organization occurs at buffer/comparator, 8. Spec. p. 30, Il. 7-16 ("Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.") The mere storage of received digital data in memory as it is received fails to teach such organization. In Oono, "the data reception processing is executed so that the succeeding data is entered into memory."

Oono, p. 9. Oono includes no teaching that the digital data is not merely transmitted in a serial fashion and placed in RAM (4) in the order it is received. All that is required to receive and use such data is to be able to detect it. No organization of any detected data is required to give meaning to the data. For at least this reason, Oono fails to teach organizing discrete signals.

Oono fails to teach a user specific subscriber datum. Oono merely discloses two instances of user input. In the first instance, an end user uses a keyboard to request that data from a head end transmitter station be embedded in the television signal and transmitted to the user. Upon receipt of such embedded data at the receiver station, "the data reception processing is executed so that the succeeding data is entered into memory." Oono, p. 9. In the second instance of user input, a user may use the keyboard to request that software program data or picture data be superimposed onto a one way signal from outside. See Oono, p. 7 ("When one wishes to put the terminal in reception mode, i.e., a video output mode to the television receiver, after hitting the mode select key (13) the key (14)-(16) is hit to select the superimposed signal, the external signal or the refresh memory output."). In Section E4, the Examiner does not clearly indicate which of these two instances of user input is being relied upon to reject claim 187. However, neither instance of user input is a user specific subscriber datum. The user input in Oono merely identifies the desired content or mode of display of content available to all users of Oono's television receiver system. The user input does not contain data about a particular user and is not related to a particular user of the Oono system. This user input in Oono is essentially nothing more than a menu choice that is commonly available to all users of such text delivery systems.

Moreover, the first instance of user input in Oono (i.e., the request to the head end that data be embedded and transmitted) clearly does not teach generation of an image by processing at least one user specific subscriber datum. The user request in Oono sent to the head end simply identifies what data is to be transmitted to the end user — the data constituting the request itself is not used to generate the image to be superimposed at the end user station. In contrast, claim

187 requires that the user specific subscriber datum (e.g., information regarding the user's stock portfolio) is actually processed and used to generate the image used in the coordinated display.

The second instance of user input in Oono (i.e., the request to select the superimposed signal) also clearly does not teach user specific datum being stored at a receiver station prior to the organization of the information in the first discrete signal with the information in the second discrete signal. As discussed above, the Examiner relies on the operation of RAM (4) to store superimposed data to show organization. The user request to select the superimposed data in Oono simply causes "the switcher (6) [to be] switched to V_2 ." Oono, p. 9. This second instance of user input does not occur and is not stored at the receiver station, if it is stored at all, prior to RAM (4) storing the received data. Further, while the user input causes a switch to switch the signal being output to the receiver from, for example, V_1 to V_2 , Oono fails to disclose the generation of an image by processing user specific subscriber datum. And finally, there is nothing about this user input that is related to a particular user — all users of Oono's system can set the switch from V_1 to V_2 . Accordingly, for at least these reasons Oono fails to anticipate claim 187.

In Section E5, the Examiner rejects claims 188, 189, 191, 192, 193, 194, 195, 196, and 197, all of which depend from claim 187, as being anticipated by Oono under § 102(b). As Oono fails to anticipate claim 187, Oono cannot anticipate any claims depending from claim 187.

Regarding claims 188 and 189, the Examiner asserts that the "recited" third discrete signal" is shown in Oono by the "TV channel selecting device . . . which generate [sic] discrete channel selection signals for selecting the TV presentation that is to be received/presented." While Oono may disclose a device for selecting the superimposed signal, Oono fails to teach a receiver specific control signal that is generated based on a third discrete signal as recited in claim 188. Further, Oono fails to teach the selection of the claimed video presentation in response to the generated receiver specific control signal as recited in claim 188. The Examiner fails to provide any showing that Oono teaches controlling a receiver, a switch, a decryptor, a storage device or a computer based on a receiver specific control signal as recited in claim 189.

Regarding claims 191 and 192, the Examiner asserts that the user specific subscriber datum recited in claims 191 and 192 is disclosed in Oono's description of a receiver terminal address. The receiver terminal address disclosed in Oono, however, is not a user specific subscriber datum based on information "supplied by a user of [the] receiver station" as required by claims 191 and 192.

Regarding claims 193 and 194, the Examiner fails to demonstrate how the "software" allegedly disclosed in Oono teaches or suggests a *discrete signal* as that term is used in the pending claims. The Examiner also fails to show how Oono teaches or suggests a *receiver specific control signal* that is *processed based on a third discrete signal* as recited in claims 193 and 194. Finally, the Examiner fails to demonstrate how Oono teaches or suggests the generation of an image by processing at least one user specific subscriber datum *based on a receiver specific control signal*, as required by claim 194.

The Office action fails to address the limitations of claims 195 - 197 and, thus, does not establish that Oono anticipates these claims.

2. Oono Applied Against Claim 93 And Claims Depending From 93

In Section E6, the Examiner asserts that Oono anticipates claim 93 under § 102(b) for the same reasons that Oono anticipates claim 187. Applicants submit that Oono fails to anticipate claim 93 for at least the reasons set forth above with respect to claim 187.

In Section E7, the Examiner rejects claims 94, 95, 100, 102, 103, and 106-109, all of which depend from claim 93, as being anticipated by Oono under § 102(b). As Oono fails to anticipate claim 93, Oono cannot anticipate any claims depending from claim 93. In addition, claims 94, 95, 100, 102, 103 and 106-109 are allowable for the reasons set forth above with respect to claims 188, 189 and 191-197.

3. Oono Applied Against Claim 56 And Claims Depending From 56

In Section E8, the Examiner asserts that Oono anticipates claim 56 under § 102(b) for the same reasons that Oono anticipates claim 187. Applicants submit that Oono fails to anticipate claim 56 for the same reasons set forth above with respect to claim 187. Additionally, regarding claim 56 the Examiner asserts:

The CPU (@3 of figure 3) which, by executing control software therein, processes the received videotext data and the user entered information to cause the "local generation" of a videotext image which is stored in a local memory (@ 4 of figure 3).

Office action, p. 68. The Examiner fails, however, to provide any analysis regarding how or why the Oono system teaches or discloses the execution of processor instructions to process remotely originated data and user specific data at a video apparatus to generate an image. As discussed above with respect to claim 187, neither the first instance of user input in Oono (i.e., the request to select the superimposed signal) nor the second instance of user input (i.e., the user request to select the superimposed data) is user specific data. The user input of Oono simply identifies selected content or the mode of display of content. The user input is not related to a particular user. Furthermore, the user input is not processed to generate an image. Accordingly, for at least these reasons, Oono fails to anticipate claim 56.

In Section E9, the Examiner rejects claims 57, 58, 60-63, 65, 66, 67-72, and 74, all of which depend from claim 56, as being anticipated by Oono under § 102(b). As Oono fails to anticipate claim 56, Oono cannot anticipate any claims depending from claim 56.

Regarding claims 57 and 58, the Examiner asserts that the CPU of Oono is a "software driven device . . . that must be programmed." The Examiner fails to demonstrate, however, how Oono teaches or discloses *programming* a video apparatus to perform the specific contacting, receiving, and displaying steps recited in claim 56, from which claims 57 and 58 depend.

Regarding claims 58 and 71, the Examiner asserts that the videotex data allegedly disclosed in Oono "inherently comprised various 'instruct signals' that caused the CPU (3) to

execute the specific portions of the software pertaining to the generation/display of the videotex data contained therein." Contrary to the Examiner's assertion, Oono neither expressly nor inherently discloses programming a video apparatus by: (1) storing a processor instruction, (2) detecting an instruct signal received at a video apparatus; and (3) executing a processor instruction in response to the instruct signal.

Regarding claims 60-62, the Examiner notes that Oono discloses videotext packets and videotext data that contain different "identifiers." While Oono does disclose a data format using a "header," Oono fails to disclose an identifier and the processes and steps associated with an identifier as recited in claims 60-62.

Regarding claim 63, the Examiner fails to show how it is "implicit" that the "videotex channel" and the "telephone modem/channel" are *digital channels*.

Regarding claim 65 and 66, the Examiner relies on his general discussion of teletext in Section C of the Office action. The Examiner fails to demonstrate how the processing of videotext data packets described in Section C of the Office action is necessarily disclosed in the Oono reference.

Regarding claims 67-72, the Examiner fails to explain how or why Oono's description of "videotex-type 'programs'" teaches or discloses "television programs" as that term is used in claims 67-72. Applicants note that Oono does not use the term "videotex."

Finally, regarding claim 74, the Examiner fails to demonstrate how Oono's description of the use of an input device (@9 of figures 3-4) specifically discloses inputting selected information to a computer and inputting an instruct signal from a local device to the computer.

G. Response To Prior Art Rejections Under § 103

1. Requirements Of Section 103

To establish a *prima facie* case of obviousness under § 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to

combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all of the claim recitations. M.P.E.P. § 706.02(j) (8th ed. 2001). Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

In order to support a § 103 rejection based on the modification of a single reference, the Examiner must provide specific evidence to show why one of ordinary skill would be motivated to modify the reference in such a way to incorporate all of the claimed elements. See In re Kotzab, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313, 1316-17 (Fed. Cir. 2000) ("Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.") (emphasis added). Broad conclusory statements concerning motivation to modify, standing alone, are not sufficient to support an obviousness rejection. See In re Freed, 425 F.2d 785, 787, 165 U.S.P.Q. 570, 571-72 (C.C.P.A. 1970) (an obviousness rejection must be based on facts, "cold hard facts"); In re Kotzab, 217 F.3d at 1370, 55 U.S.P.Q.2d at 1317 ("Broad, conclusory statements standing alone are not 'evidence.'"). Accordingly, a statement that a modification would be an "obvious design choice," without factual support, is insufficient as a matter of law. In re Dembiczak, 175 F.3d 994, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999), abrogated on other grounds by In re Gartside, 203 F.3d 1305, 53 U.S.P.Q.2d 1769 (Fed. Cir. 2000). Finally, as the absence of a suggestion to modify a reference is dispositive in an obviousness determination, a rejection which fails to provide specific evidence as to why one of ordinary skill would be motivated to modify the relevant reference is insupportable, as a matter of law. See Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 42 U.S.P.Q.2d 1378 (Fed. Cir. 1997).

In order to support a § 103 rejection based on a combination of references, the Examiner must provide a sufficient motivation for making the relevant combinations. *See* M.P.E.P. §§ 2142 and 2143.01; *see also In re Rouffet*, 149 F.3d 1350, 1355, 47 U.S.P.Q.2d 1453, 1456 (Fed.

Cir. 1998) ("When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references."). It is well-settled that an Examiner can "satisfy [the burden under 35 U.S.C. § 103 to establish a prima facie case of obviousness] only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references." In re Fine, 837 F.2d 1071, 1074, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (emphasis added); see also In re Lee, 277 F.3d 1338, 1344, 61 U.S.P.Q.2d 1430, 1434 (Fed. Cir 2002) ("'deficiencies of the cited references cannot be remedied by the Board's general conclusions about what is 'basic knowledge' or 'common sense'"). As with rejections based on the modification of a single reference, "[b]road conclusory statements regarding the teaching of multiple references, standing alone, are not 'evidence [of a motivation to combine]" and thus do not support rejections based on combining references. In re Dembiczak, 175 F.3d at 999, 50 U.S.P.Q.2d at 1617. Without objective evidence of a motivation to combine, the obviousness rejection is the "essence of hindsight" reconstruction, the very "syndrome" that the requirement for such evidence is designed to combat, and without which the obvious rejection is insufficient as a matter of law. *Id.* at 999, 50 U.S.P.Q.2d at 1617-18.

As set forth in greater detail below, the Examiner has failed to follow these requirements when making the § 103 rejections of the claims of the instant application. For this reason alone, the § 103 rejections should be withdrawn.

2. Rejection Based On Oono In View Of Zworykin

As set forth in Section E-10 of the Office action, claim 73 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Oono in view of U.S. Patent 2,757,226 issued to Vladimir K. Zworykin ("Zworykin"). Claim 73 depends from claim 56. It is asserted in the Office action that claim 73 differs from the showing of Oono only in that Oono did not describe the TV programming as having been scrambled. Applicants respectfully disagree. Oono fails to teach all of the claim limitations set forth in claim 56 as set forth in detail above with respect to

the rejection of claim 56 under 35 U.S.C. § 102(b) as being anticipated by Oono. Claim 73 is patentable over Oono in view of Zworykin for these reasons.

Moreover, there is no motivation found in the prior art to combine the teachings of Oono and Zworykin. The Office action asserts that it would have been obvious to have utilized the conventional TV distribution network of Oono to distribute conventional TV programming on a subscription basis. However, the Office action does not rely on Oono to show a conventional TV distribution network. Rather, the Office action asserts that Oono provides a combined display of text and television video. The data transmitted in Oono is requested by a user and addressed to a particular receiver. Oono, p. 7, 1. 22 - p. 9, 1. 5. Thus, there is not necessarily a need to scramble the TV signal to prevent unauthorized use of the data as suggested in the Office action. There is simply no suggestion in Oono that is consistent with the transmission of "conventional TV programming" on a subscription basis.

3. Rejection Based On Hedger In View Of Sedman And Either Yoshino Or Bart

Claims 56-58, 60-63, 65, 66, 73, 89-91, 93-95, 98, 100, 102, 103, 106-109 and 187-197 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over "Telesoftware - Value Added Teletext" by J. Hedger et al. ("Hedger") in view of "The Use of MicroCobol for Telesoftware" by E. C. Sedman ("Sedman") and either British Patent 1 405 141 naming inventors Hirokazu Yoshino et al. ("Yoshino") or U.S. Patent 4,213,698 issued to Theodor E. Bart et al. ("Bart").

In this three-reference combination, the Office action merely patches together selected aspects of the references in an attempt to reconstruct applicants' invention. Hedger is directed to providing software through teletext delivery systems. Sedman is directed to providing software as viewdata through the Prestel system. Yoshino is directed to an electronic calculator that outputs a multiple row display in superposition with television. Bart is directed to displaying graphical teletext with television by automatically maintaining a predetermined relationship between the intensity of displayed graphics information and the variable level of the television signals.

a. Claim 56

Claim 56 is directed to a method for presenting a video presentation including a remotely transmitted image and a locally generated image. The remotely transmitted image comes from a remote video source. The locally generated image is generated by processing remotely originated data received from a remote data source and user specific data. The remotely originated data is received based on contacting the remote data source. The user specific data is received and is specific to a user. The remotely transmitted image and the locally generated image are displayed simultaneously.

Specifically, claim 56 includes the limitations of executing processor instructions to process the remotely originated data and the user specific data in order to generate the locally generated image. The user specific data is received at the video apparatus and is specific to a user of the video apparatus. The locally generated image and the image received from a remote source are simultaneously displayed.

An example of the invention defined by claim 56 is the display of the user's stock portfolio performance in the "Wall Street Week" embodiment disclosed by both of applicants' priority specifications. In this example, remotely originated stock prices and the user specific stock portfolio data are processed to generate a graph of the user's portfolio performance. The graph is then displayed during the "Wall Street Week" television program.

Section E-11 of the Office action sets forth the rejection of claim 56 based on Hedger in view of Sedman and either Yoshino or Bart. In Section E-11, it is acknowledged that Hedger fails to suggest contacting a remote data source and fails to suggest simultaneously displaying a locally generated image and an image received from the remote video source. The secondary references are applied to show these limitations. There is no motivation or suggestion found in the prior art to combine the references in the manner suggested in the Office action.

Sedman is applied to show the possibility of calculating the current value of a portfolio of shares by accessing the stock exchange prices through the Prestel system. The Office action asserts that the teletext as described by Hedger and the viewdata as described by Sedman are

merely different forms of "Videotext." It is further asserted that viewdata is a known alternative to teletext. These assertions fail to establish a motivation to modify any teaching of Hedger to include contacting a remote data source for information. The Office action acknowledges that the information can be readily disseminated either as teletext or viewdata. There is no suggestion in either Hedger or Sedman to receive both teletext and viewdata in a single system as suggested by in the Office action. To the contrary, Hedger teaches away from sending any information to a central computer in the manner of the Sedman system:

Since there is no possibility of 'feedback' to a central computer of information supplied by the viewer, the system is completely confidential and viewers can supply information truthfully in the full confidence of knowing it can go no further than the television receiver - pull the power cord out and the slate is wiped clean.

Hedger at 563, col. 2. Accordingly, Hedger teaches away from sending requests to a central computer.

Bart and Yoshino are applied to show displaying data on a TV receiver as an overlay on TV programming. There is no suggestion to use the systems of either Bart or Yoshino to display TV graphics in the Hedger system. The Examiner merely is asserting that various teachings of the cited art could be combined. However, there is no suggestion in the cited art to actually make the modifications suggested in the Office action.

A statement that modifications of the prior art to meet the claimed invention would have been 'well within the ordinary skill of the art at the time the claimed invention was made' because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references.

M.P.E.P. § 2143.01 (citing *Ex parte Levengood*, 28 U.S.P.Q.2d 1300 (Bd. Pat. App. & Inter. 1993)). The Office action includes no objective reason why a person of ordinary skill would combine the step of executing processor instructions to process remotely originated data and user

specific data in order to generate a locally generated image with the step of simultaneously displaying the locally generated image and an image received from a remote video source. Bart shows displaying teletext data overlaid with the television programming with which it is received. Yoshino shows displaying a computation input by a user with television programming. Neither reference suggests generating a locally generated image by processing remotely originated data and user specific data and simultaneously displaying the locally generated image and an image received from a remote video source as set forth in claim 56.

b. Claims 57, 58, 60-63, 65, 66, 73 And 89-91

Claims 57, 58, 60-63, 65, 66, 73 and 89-91 depend from claim 56. In section E-12, these claims are rejected as being unpatentable over Hedger in view of Sedman and either Yoshino or Bart for the same reason that was set forth for claim 56. These claims are patentable over these applied references for at least the reasons set forth above with respect to claim 56.

Claim 57 sets forth the method of claim 56 further comprising the step of programming the video apparatus to perform any one of the steps of contacting, receiving the remotely originated data, and displaying. The Office action notes that the microcomputer of Hedger is programmed with downloaded "telesoftware." However, there is no teaching in Hedger that the telesoftware performs any of the steps recited in claim 57. To the contrary, the Office action specifically acknowledges with regard to claim 56 that Hedger does not suggest contacting a remote data source to obtain remotely originated data and does not suggest a locally generated image displayed simultaneously with received video. Accordingly, Hedger does not suggest programming a video apparatus to perform the recited steps.

Claim 58 sets forth the method of claim 56 further comprising a step of programming the video apparatus to perform the step of displaying. The step of programming comprises the steps of storing at least one processor instruction in a computer, detecting an instruct signal received at the video apparatus, and executing the at least one processor instruction in response to the instruct signal. The Office action asserts that some type of instruction must be given to the

microcomputer of Hedger to cause the "telesoftware" to be executed to calculate the value of the portfolio. This assertion is insufficient to render claim 58 obvious. First, the claim limitation is directed to programming the apparatus to perform the step of displaying — not a step of calculating a portfolio value as relied upon in the Office action. Second, there is no teaching of any instruct signal in Hedger. Hedger merely asserts the advantages of teletext to program home microcomputers. Hedger simply does not provide any details of the specific manner of operation of any particular telesoftware program. Contrary to the assertion in the Office action, the calculations performed by the telesoftware programs could be performed without detecting any instruct signal received at the video apparatus.

Claim 60 sets forth that the method of claim 56 further comprises processing an identifier. Claim 61 sets forth that the identifier identifies a television program, a communications resource, or the locally generated image. The Office action points to no identifiers in the applied art. Rather, it is asserted that the receiver must receive and process many types of identifiers in order to perform the described operations. There is no support for this statement. Furthermore, the telesoftware receiver of Hedger need not receive an identifier that identifies a television program, a communications resource, or a locally generated image. Claim 62 sets forth that the identifier is received at the video apparatus from the remote video source or the remote data source. There is no suggestion that the receiver in Hedger receives such an identifier from either a remote video source or a remote data source.

Claim 65 sets forth a step of organizing first information included in a first discrete signal with second information included in a second discrete signal in order to enable the video apparatus to process at least one organized signal which comprises the first information and the second information. Claim 66 sets forth that the step of organizing is controlled by a processor. The Office action asserts that the "telesoftware" of Hedger inherently comprises discrete signals which had to be received and organized by the microcomputer prior to execution. The Office action fails to explain how Hedger "inherently" discloses discrete signals that *are organized* by a microcomputer prior to execution. In applicants' invention, "signals may convey information in

discrete words, transmitted at separate times or in separate locations, that the receiver apparatus must assemble in order to receive one complete instruction." Spec. p. 14, ll. 22-25. As the discrete words may be transmitted at various and varying locations, the mere detection of the signal words is insufficient to give meaning to the signal. These signals must be organized into units, such as instructions. Spec. p. 14, ll. 26 - p. 15, l. 6. This organization occurs at buffer/comparator, 8. Spec. p. 30, ll. 7-16 ("Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.") Hedger merely describes the experimental use of the ORACLE teletext broadcast system to distribute software. There is no suggestion in Hedger that a selected page of teletext character data is not merely stored in a page store in the order it is received. Any receiver capable of detecting the teletext signal of Hedger will recognize the character data. Such a receiver will merely store the data as it is received to form a page of teletext. No organization is required. All that is required for the Hedger system to recognize the teletext as telesoftware is for the microprocessor to scan the page of data for a special sequence of characters. Hedger § 2.2. Thus, no organization of discrete signals is inherent in the teaching of Hedger.

Claim 73 sets forth that the video apparatus receives encrypted video from the remote video source. The Office action asserts that it would have been obvious for the TV programming that is displayed on the TV receiver in Hedger to have been from a conventional subscription-type TV signal source requiring decryption. There is no support for this assertion. The Office action points to no teaching in the applied art to show a subscription-type TV signal source requiring decryption.

Claim 89-91 are listed in the heading of section E-12 in the Office action as rejected as being unpatentable over Hedger in view of Sedman and either Yoshino or Bart. There is no explanation of how the limitations set forth in claims 89-91 are suggested by the applied art in the Office action. Accordingly, the Office action fails to establish a *prima facie* case of

obviousness against these claims. Applicants submit that the limitations of claims 89-91 are not suggested by the applied art.

c. Claim 93

Claim 93 is directed to a method for a receiver station to receive discrete signals that are organized into a complete instruction with a specified effect. In claim 93, the receiver station receives, detects, and passes discrete signals found in an information transmission to a processor. The receiver station organizes the first discrete signal with the second discrete signal into an organized signal. The organized signal is effective to generate an image by processing user specific subscriber data. The user specific data is stored at the receiver station prior to the organizing of the organized signal and is based on information supplied by a user of the receiver station. The result is an outputted presentation of a video image and a coordinated display using the generated image and the video image.

In section E-13 of the Office action, claim 93 is rejected as being unpatentable over the three-reference combination of Hedger in view of Sedman and further in view of either Yoshino or Bart. The Office action fails to set forth a proper rejection of claim 93 under 35 U.S.C. § 103(a). There is no explanation in the Office action setting forth the differences in claim 93 over the applied references. The Office action proposes no modifications to the applied references necessary to arrive at the claimed subject matter. The Office action includes no explanation why one of ordinary skill would have been motivated to make any modification of the applied references. Accordingly, the Office action fails to establish a *prima facie* case of obviousness against claim 93.

The Office action asserts that any time generated image data is overlaid/inset into a displayed video signal the timing of the display must be "coordinated" with the raster scanning of the displayed video signal. This assertion is insufficient to render claim 93 unpatentable. First, there is no suggestion in the applied art that any generated image generated by processing a user specific subscriber datum is overlaid/inset into a displayed video signal. Second, the timing

of the displayed image need not be coordinated with the displayed video signal as set forth in claim 93. The Office action merely notes that the timing of the horizontal and vertical frequencies of the signal of an overlay and an underlying video signal must be synchronized. However, this synchronization has no bearing on which frames of the underlying video the overlay is displayed upon. Thus, the synchronization does not control the time at which the overlay is displayed. Accordingly, the display of the video and the display of an overlay are not coordinated with the synchronization signals as asserted in the Office action.

d. Claims 94, 95, 98, 100, 102, 103, 106-109 And 187-197

Section E-14 of the Office action includes a single sentence setting forth that the claims 94, 95, 98, 100, 102, 103, 106-109, and 187-197 are rejected as being unpatentable over the three-reference combination of Hedger, Sedman, and either Yoshino or Bart for the same reason that was set forth for claim 93 above. The Office action includes no attempt to establish a *prima facie* case of obviousness against these claims. Claims 94, 95, 98, 100, 102, 103 and 106-109 depend from claim 93. Hedger, Sedman, and either Yoshino or Bart fail to render these dependent claims obvious for at least the reasons discussed above with respect to claim 93.

Claim 187 is patentable over Hedger, Sedman, and either Yoshino or Bart for similar reasons to those set forth above with respect to claim 93. The Office action includes no attempt to set forth a proper *prima facie* case of obviousness against claim 187. As discussed above with respect to claim 93, the applied art fails to suggest that any generated image generated by processing a user specific subscriber datum is overlaid/inset into a displayed video signal. Accordingly, the applied art fails to suggest at least the combination of steps of generating an image by processing a user specific subscriber datum and outputting a video presentation comprising a video image and a coordinated display using the generated image and the video image as set forth by claim 187. Claims 188-197 depend from claim 187. The Office action fails to address the limitations set forth by these claims. The dependent claims are patentable over the applied art for at least the above reasons regarding claim 187 from which they depend.

4. Rejection Based On Kirschner In View Of Bart

Claims 56-58, 60-63, 65-74 and 89-91 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,253,157 issued to Wallace Kirschner ("Kirschner") in view of Bart. Kirschner is directed to subscription data service where data is retrieved over phone lines. The Kirschner receiver includes an application module to enable various types of applications. Bart, as discussed above, shows displaying teletext data overlaid with the television programming with which it is received.

a. Claim 56

As discussed above, claim 56 includes steps of executing processor instructions to process the remotely originated data and the user specific data in order to generate the locally generated image. The user specific data is received at the video apparatus and is specific to a user of the video apparatus. The locally generated image and the image received from a remote source are simultaneously displayed. The Office action incorrectly characterizes the teaching of Kirschner and fails to provide an adequate motivation to combine the teachings of the Kirschner and Bart in the manner suggested.

In Section E-15 of the Office action, it is asserted that during one or more initialization processes, user specific information is received that is stored in the memory of the application modules of Kirchner. Kirchner suggests no such initialization process. Kirchner describes an initialization process in column 5, lines 26-25. This initialization merely calls various routines that display an index of the titles of the inserted application modules and transfers control from the basic terminal to a selected module. Kirchner does not suggest receiving user specific data, as discussed above in Section E above, during this initialization process.

In the Office action, it is acknowledged that claim 56 differs from the showing of Kirschner in that the television receivers in Kirchner do not display the magazine text over conventionally received TV signal broadcasts. The Office action asserts that Bart is cited as evidencing the fact that it was well known in the art to have configured conventional TV receivers so as to have operated in a plurality of user selectable display modes. It is further

asserted that it would have been obvious to one of ordinary skill in the art to have implemented the TV receivers in Kirchner to have the multi-display configuration of Bart. The Office action asserts that such a modification was advantageous in that it prevented the users from missing TV programming of interest when accessing the data from a remote database. These assertions are insufficient to render claim 56 obvious.

There is no suggestion in the art to have implemented TV receivers as shown in Kirchner to have the multi-display options of Bart. The Examiner acknowledges that Kirchner does not suggest the display of the data, which is retrieved over phone lines, over conventionally received TV video. Bart is directed to displaying graphics from Teletext encoded video signals. Bart col. 3, Il. 28-29. The teletext graphics are displayed with the video in which they are encoded. There is no suggestion in Bart to display teletext graphics retrieved over the phone lines with wholly unrelated video as the Examiner proposes. Bart does not suggest accessing videotext while watching conventional TV programming as asserted by the Examiner. There is, thus, no motivation found in the prior art to combine these references in the manner suggested by the Examiner.

b. Claims 57, 58, 60-63, 65-74 And 89-91

Claims 57, 58, 60-63, 65-74 and 89-91 depend from claim 56. In section E-16, these claims are rejected as being unpatentable over Kirschner in view of Bart for the same reason that was set forth for claim 56. These claims are patentable over these applied references for at least the reasons set forth above with respect to claim 56.

Claim 57 sets forth the method of claim 56 further comprising the step of programming the video apparatus to perform any one of the steps of contacting, receiving the remotely originated data, and displaying. Kirschner includes no step of programming the receiver to perform steps of contacting, receiving remotely originated data, or displaying. The Kirschner system includes a receiver that requires no step of programming to perform any of its functions.

Claim 60 sets forth that the method of claim 56 further comprises processing an identifier. Claim 61 sets forth that the identifier identifies a television program, a communications resource, or the locally generated image. The Office action asserts that the Kirschner terminal processes many "identifiers." However, the Office action does not point out any identifier that identifies a television program, a communications resource, or a locally generated image. Claim 62 sets forth that the identifier is received at the video apparatus from the remote video source or the remote data source. There is no suggestion that the receiver in Kirschner receives such an identifier from either a remote video source or a remote data source.

Claim 65 sets forth a step of organizing first information included in a first discrete signal with second information included in a second discrete signal in order to enable the video apparatus to process at least one organized signal which comprises the first information and the second information. Claim 66 sets forth that the step of organizing is controlled by a processor. The Office action asserts that various subroutines are organized together. There is no suggestion in Kirschner that any subroutines are discrete signals that include information that is organized with information from other discrete signals in order to enable apparatus to process an organized signal.

Claim 67 sets forth the method of claim 56 further comprising the step of storing a first television program. Claim 68 sets forth the display of the locally generated image based on the step of storing. The Office action relies on the storage of subscription data in Kirchner to show this limitation. The subscription data in Kirchner is not a television program. The Examiner asserts that the term "television programming" covers all forms of television information. However, the claim recites a "television program" not "television programming." The Office action fails to demonstrate how the applied art suggests storing a television program.

The Office action fails to attempt to present a *prima facie* case of obviousness against claim 69 and 72. Claim 69 sets forth that the video apparatus includes a computer which stores the remotely originated and the user specific data. The applied art fails to teach this limitation. Claim 72 sets forth that the first television program is received from the remote video source.

The Office action fails to show that the subscription data that is relied upon to show the first television program is received from a remote video source.

Claim 73 sets forth that the video apparatus receives encrypted video from the remote video source. The Examiner asserts that was notoriously well known in the art for the video signal to have been provided to the receiver in an encrypted format. Applicants disagree. To the extent that the Examiner is taking Official Notice that TV providers commonly encrypted the TV programming, applicants traverse this assertion and request that the Examiner support this assertion with prior art.

Claim 90 sets forth that the locally generated image is overlaid on the image received from the remote video source. The Office action merely refers to a "mixed mode" display. There is no suggestion in the prior art of a "mixed mode" display that includes a locally generated image generated by processing user specific data as set forth in claim 56.

Claim 91 sets forth a step of receiving, at an audio receiver, audio which describes information displayed in the video presentation and a step of outputting the audio at the video apparatus before ceasing to display the locally generated image. In the Office action it is asserted that the audio portion of TV programming often explains what is taking place in the video portion. It is further asserted that captioning pertaining to the audio portion of the programming would be displayed with the audio with which it is related. However, captioning is not a locally generated image based on user specific data as set forth in claim 56. The primary reference to Kirschner does not address captioning data and there is no suggestion in the applied art to treat the data retrieved by the Kirschner system as captioning data.

5. Rejection Based On Betts In View Of Bart, Oono And Crowther

Claims 93, 94, 95, 98, 100, 103, 106-108, 187-191 and 193-196 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 556 366 naming as inventor William Robert Betts ("Betts") in view of Bart. Claims 188-191, 193 and 194 stand rejected as being unpatentable over the three-reference combination of Betts in view of Bart and further in view of

"Teletext Receiver LSI Data Acquisition and Control" by G.O. Crowther, et al. ("Crowther"). Claims 102, 109, 192 and 197 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the three-reference combination of Betts in view of Bart and Oono. Betts is directed to a teletext display system. Crowther is directed to the British Broadcasting Corporation's CEEFAX system.

a. Claim 187

Claim 187 is directed to a method for a receiver station to receive discrete signals that are organized into a complete instruction with a specified effect. In claim 187, the receiver station receives, detects, and passes discrete signals found in an information transmission to a processor. The receiver station organizes the first discrete signal with the second discrete signal into an organized signal. An image is generated by processing user specific subscriber data. The user specific data is stored at the receiver station prior to the organizing of the organized signal and is based on information supplied by a user of the receiver station. The organized signal is effective to output a presentation of a video image and a coordinated display using the generated image and the video image.

The teletext data of Betts is relied upon in Section E-17 of the Office action to show the discrete signals set forth in claim 187. It is asserted that RAM (15) of Betts organizes data from discrete teletext packet signals into a page of data. In applicants' invention, "signals may convey information in discrete words, transmitted at separate times or in separate locations, that the receiver apparatus must assemble in order to receive one complete instruction." Spec. p. 14, II. 22-25. As the discrete words may be transmitted at various and varying locations, the mere detection of the signal words is insufficient to give meaning to the signal. These signals must be organized into units, such as instructions. Spec. p. 14, II. 26 - p. 15, I. 6. This organization occurs at buffer/comparator, 8. Spec. p. 30, II. 7-16 ("Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.") The RAM (15) of Betts merely stores data that is input to it through

data bus 14. There is no suggestion that the data is stored in any order other than that in which it is received. The data transmitted consists of a number of pages. The selected pages are stored in RAM (15). There is no suggestion of any organization performed by RAM (15).

Moreover, the Office action relies upon the user selected teletext page number to show a user specific subscriber datum. A mere page selection is not a user specific datum for the reasons set forth above in Section E. Every user that views any selected teletext page will input the same selection. The selection is thus not data related to a *particular* user. Betts fails to suggest a user specific subscriber datum as set forth in claim 187.

Furthermore, the applied art fails to teach distinct steps of organizing discrete signals and generating an image. In Betts, on detection of the desired page number, the information is fed into the correct address in RAM (15). Betts at 2, ll. 60-64. To the extent that the Office action relies on the storage of teletext pages in RAM (15) to show organization, it is the organization that occurs by processing the selected teletext page number. In the Office action, it is asserted that the CPU (13), RAM (15), character generator (18), parallel to serial converter (19) and control box (20) of Betts together comprise circuitry for generating a teletext image by processing the information entered by the user. There is no step of generating using these components set forth in Betts in addition to and distinct from storing the teletext data in RAM (15) which is relied upon to show the step of organization.

Claim 187 sets forth the step of generating an image by processing a user specific subscriber datum. The user specific subscriber datum is stored at the receiver station prior to the step of organizing. As discussed above, the selected page number is improperly relied upon by the Examiner to show a user specific subscriber datum. The selected page number is used to identify the data to be stored in RAM (15). Not only is the Examiner incorrect in asserting that the selected page number constitutes user specific subscriber datum, there is no suggestion in Betts that the selected page number is stored and subsequently processed to generate any image using the data stored in RAM (15). The selected page number is used to select which data will be stored in RAM (15) but is not further processed to generate any image using the data stored in

RAM (15). Accordingly, for this additional reason, Betts does not teach generating an image by processing a user specific subscriber datum.

In the Office action, it is acknowledged that Betts does not describe the display of a teletext image that is coordinated with the display of a video image. The Office action asserts that it was well known in the art to offer a mixed mode display. It is further asserted that it would have been obvious to one of ordinary skill in the art to have configured switch (3) in Betts to provide a "mixed mode." However, even if true, this combination does not result in a video presentation comprising a video image and a coordinated display using a locally generated image and the video image. There is no showing in either Betts or Bart to coordinate the display of a locally generated image with a video image as set forth in 187.

b. Claims 93, 107 And 108

Section E-27 rejects claims 93, 107 and 108 over Betts in view of Bart for the same reasons that were set forth for claim 187. Claim 93 is patentable over Betts in view of Bart for the reasons set forth above with respect to claim 187. Betts fails to suggest a user specific subscriber datum for the reasons set forth in Section E above. Accordingly, the applied art fails to suggest generating an image by processing a user specific subscriber datum as set forth by claim 93. Furthermore, as discussed above, the Office action relies on the storage of the teletext data in RAM to show organization. However, once the data is stored in RAM, the page selection number relied upon to show a subscriber specific datum is not further used. Accordingly, no image is generated in response to the organized signal by processing a user specific subscriber datum in Betts.

Claims 107 and 108 depend from claim 93 and are patentable over Betts in view of Bart for at least the reasons set forth above with respect to claim 93.

c. Claims 195 and 196

Claims 195 and 196 depend from claim 187. Section E-17, in addition to rejecting claim 187 as being unpatentable over the three-reference combination of Betts in view of Bart, rejects

claims 195 and 196. Claims 195 and 196 are patentable over Betts in view of Bart for at least the reasons set forth above with respect to claim 187.

d. Claims 188-191, 193 And 194

Claims 188-191, 193 and 194 depend from claim 187. In Section E-25 of the Office action, claims 188-191, 193 and 194 are rejected as being unpatentable over the three reference combination of Betts in view of Bart and further in view of Crowther. The Office action fails to present any motivation to combine the teaching of Betts and Crowther. Rather, the Office action asserts that the processor in Betts provides all the same operations that are provided by the data acquisition circuitry of Crowther. It is thus asserted that claims 188-191, 193 and 194 are unpatentable for the same reasons as set forth in the rejection based on Crowther in view of Bart. To the extent that Crowther and Betts show identical features, applicants' response below to the rejection over Crowther in view of Bart addresses this rejection. To the extent that Crowther shows features not shown in Betts, there is no suggestion in the Office action to modify Betts to include any additional features shown in Crowther.

e. Claims 94, 95, 98, 100, 103 And 106

Claims 94, 95, 98, 100, 103, and 106 depend from claim 93. In Section E-28 of the Office action, claims 94, 95, 98, 100, 103, and 106 are rejected as being unpatentable over Betts in view of Bart for the same reasons as set forth for claim 93. The Office action fails to address any of the limitations set forth in these dependent claims. Accordingly, the Office action fails to establish a *prima facie* case of obviousness against these claims. The Office action references a discussion with respect to corresponding claims 188-191, 193, and 194. However, claims 188-191, 193 and 194 do not stand rejected based on Betts in view of Bart, but rather the rejection of these claims also relies on Crowther. The use of Crowther would not render these claims obvious for the reasons discussed above.

f. Claims 102, 109, 192 And 197

Claims 192 and 197 depend from claim 187. In Section E-26 of the Office action, claims 192 and 197 are rejected as being unpatentable over the three-reference combination of Betts in view of Bart and further in view of Oono. Claim 192 sets forth a step of contacting a remote station to obtain the user specific subscriber datum. Claim 197 sets forth a step of receiving the user specific subscriber datum from a remote data source. The Office action acknowledges that these claims differ from the system in Betts in that the modified system of Betts does not show contacting a remote station to obtain a user specific subscriber datum. The Office action asserts that a key advantage of Betts is its ability to be easily re-programmed to provide different receiver functions. This statement is erroneous. Betts discloses at page 1, lines 70-73, "An advantage of the arrangement according to the present invention is that by alteration of the program a number of different functions may be obtained." No re-programming is suggested. Betts merely contemplates that different embodiments of the invention may have different programs.

The Office action asserts that the configuration of the Oono decoder corresponds in many ways to the configuration of the Betts decoder. Given this, the Examiner maintains that it would have been obvious to one of skill in the art to have reprogrammed Betts to add software to implement the "hybrid" videotext of Oono. The allegation that Betts and Oono are similar is insufficient to establish a motivation to include features of Oono in the Betts system.

Furthermore, there is no teaching to reprogram Betts as discussed above. Moreover, Oono does not teach contacting a remote station to obtain a user specific subscriber datum for the reasons set forth above with respect to the rejections based on Oono.

Claims 102 and 109 are similar to claims 192 and 197, but depend from claim 93.

Claims 102 and 109 are rejected in section E-29 as being unpatentable over the three-reference combination of Betts in view of Bart and further in view of Oono. The Office action references the discussion with respect to corresponding claims 192 and 197. Claims 102 and 109 are

patentable over Betts, Bart and Oono for the reasons set forth above with respect to claims 192 and 197.

6. Rejection Based On Crowther In View Of Bart

Claims 93, 94, 95, 98, 100, 103, 106-108, 187-191 and 193-196 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Crowther in view of Bart. The Examiner notes that the Crowther system corresponds to the circuitry shown in Betts with the exception that Crowther includes dedicated "Data Acquisition" circuitry where Betts includes a CPU. Applicants note that there are other differences in the details of the structure provided in the two references. However, the two references are applied in a similar manner. The rejections over Crowther in view of Bart are improper for the same reasons as the rejections over Betts in view of Bart.

a. Claim 187

In Section E-18 of the Office action, the teletext data of Crowther is relied upon in the Office action to show the discrete signals set forth in claim 187. It is asserted that the memory of Crowther organizes data from discrete teletext packet signals into a page of data. Crowther includes no suggestion that the memory organizes discrete teletext packets. In applicants' invention, "signals may convey information in discrete words, transmitted at separate times or in separate locations, that the receiver apparatus must assemble in order to receive one complete instruction." Spec. p. 14, ll. 22-25. As the discrete words may be transmitted at various and varying locations, the mere detection of the signal words is insufficient to give meaning to the signal. These signals must be organized into units, such as instructions. Spec. p. 14, ll. 26 - p. 15, l. 6. This organization occurs at buffer/comparator, 8. Spec. p. 30, ll. 7-16 ("Buffer/comparator, 8, receives said signals from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.") Crowther merely notes that "the digital data acquisition circuit processes the incoming data from the video signal so that the selected page can be recognised and written into the memory." Crowther at 9/1. The

teletext is recognizable in page form as it is received with no reference to any information needed to assemble or organize the page. There is no suggestion that the incoming data is stored in any order other than that in which it is received. The page of teletext data is written into the memory in the form it is received. There is no suggestion of any organization performed by the memory in Crowther.

Crowther, like Betts, fails to teach distinct steps of organizing and generating an image. The Office action relies upon the user selected teletext page number to show a user specific subscriber datum. Selection data is not user specific data for the reasons set forth in Section E above. As every user that views any particular teletext page will input the same selection, the selection data is not data related to a particular user. Furthermore, Crowther does not include any details setting forth how any user input, including a selected teletext page number, is used to organize any information. The Examiner appears to assume that Crowther operates as the Betts system operates. To the extent that the Examiner is relying on the teaching of Betts, the rejection is erroneous for the reasons set forth above with respect to Betts. Crowther does not suggest generating an image by processing a user specific subscriber datum. The Office action asserts that the "Signal Acquisition," "Memory" and "Display" circuitry of Crowther are for generating a teletext image by processing a user selected teletext page number. Crowther includes no such teaching. Although the user selected teletext page number is processed and an image is produced, there is no suggestion that the image is generated by processing the selected teletext page number. To the contrary, to the extent that Crowther operates like the Betts system as implied in the Office action, the selected teletext page number is processed only so that the correct page can be written into the memory. The selected teletext page number is not then used to generate the teletext image.

b. Claim 93

Claim 93 is similar to claim 187 with the exception that the step of generating an image is expressly in response to the organized signal as opposed to the step of outputting the video

presentation. Section E-30 rejects claim 93 over Crowther in view of Bart for the same reasons that were set forth for claim 187. Claim 93 is patentable over Crowther and Bart for the reasons set forth above with respect to claim 187 and for the reasons set forth with regard to the rejection over Betts in view of Bart.

c. Claims 94, 95, 98, 100, 103, 106-108, 188-191 And 193-196

Claims 188-191, and 193-196 depend from claim 187. Section E-18 rejects claims 187, 195 and 196 as being unpatentable over Crowther in view of Bart. In Section E-24 of the Office action, claims 188-191, 193 and 194 are rejected as being unpatentable over Crowther in view of Bart for the same reasons as set forth for claim 187. Dependent claims 188-191 and 193-196 are patentable over Crowther in view of Bart for at least the reasons set forth above with respect to claim 187.

Claim 188 sets forth that a receiver specific control signal is generated based on a third discrete signal and sets forth selecting the video presentation in response to the generated receiver specific control signal. Claim 189 sets forth controlling a receiver, a switch, a decryptor, a storage device, or a computer based on the receiver specific control signal. The Office action asserts that Crowther teaches generation of a receiver specific write control activation control signal based on a third discrete signal component of the teletext data which identifies the page number of the teletext. Crowther merely states, "if the data line being transmitted is part of the requested page then the memory write control circuits are activated." Crowther at 9/3. There is no suggestion that any write control activation control signal is generated based on a third discrete signal. There is no suggestion that any video presentation is selected in response to any write control activation control signals.

Claim 190 sets forth that the third discrete signal of claim 188 includes only partial information of an identifier. The Office action asserts that the page number itself is partial information as each captured row is identified by row identifying addresses. Crowther includes no such teaching. Furthermore, claim 190 sets forth that a discrete signal includes partial

information of an identifier. Crowther does not teach a discrete signal that includes a page number without a row number that is included with the page number to form an identifier.

Claims 193 and 194 set forth a receiver specific control signal that is processed based on a third discrete signal. Claim 193 sets forth outputting the video image in response to the receiver specific control signal. Claim 194 sets forth that the step of generating is based on the receiver specific control signal. The Office action asserts that the user input page number is compared to received page numbers and used to generate activation signals which ultimately cause the display of the teletext image. However, the user input page number is relied upon, improperly as discussed in Section E above, to show the user specific subscriber datum. Crowther does not suggest both a user specific subscriber datum and a receiver specific control signal. The Office action merely asserts that the user input page number is compared to received page numbers. There is no suggestion that the page number itself is processed based on a third discrete signal. Furthermore, Crowther suggests no activation signals as asserted in the Office action. With respect to claim 193, the Office action asserts that the "activation signals" cause the display of the teletext image. However, claim 193 sets forth that the video image is output in response to the receiver specific control signal. In the rejection of claim 187, the Office action relies on television video, not teletext, to show the video image. Accordingly, the display of teletext is not the output of the video image as set forth in claim 193.

Claims 94, 95, 98, 100, 103, and 106-108 are similar to claims 188-191, 193 and 194-196. Section E-30 of the Office action rejects claims 93, 107 and 108 as being unpatentable over Crowther in view of Bart. Claims 94, 95, 98, 100, 103, and 106 are rejected as being unpatentable over Crowther in view of Bart in Section E-31 of the Office action for the same reasons as set forth for claim 93. The Office action references a discussion with respect to corresponding claims 188-191, 193, and 194. Claims 94, 95, 98, 100, 103, and 106-108 are patentable over Crowther in view of Bart for the reasons set forth above with respect to claim 93 and for the additional reasons set forth with respect to claims 188-191, 193 and 194-196.

7. Rejection Based On Millar In View Of Marti

Claims 84, 85, 86, 87, 183-191 and 193-196 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over British Patent 1 370 535 naming as inventors Ian David Balfour Millar, et al. ("Millar") in view of U.S. Patent 4,290,062 issued to Bernard Marti, et al. ("Marti"). Millar is directed to transmitting alphanumeric information with a video signal. Marti is directed to transmitting and displaying text on a television screen.

a. Claim 84

Claim 84 defines a method for a transmitter station to transmit a plurality of discrete signals that are organized at a receiver station into signals that have specified effects at the receiver station. In claim 84, video and two discrete signals are received and transmitted by the transmitter station. Information included in the discrete signals is organized into an organized signal. The organized signal is effective at the receiver station to generate or output a locally generated image with the remotely transmitted video. The locally generated image is based on user specific data. The user specific data is stored at the receiver station prior to providing the organized signal and is based on information supplied by a user of the receiver station.

In Section E-19 of the Office action, claim 84 is rejected as being unpatentable over Millar in view of Marti. The applied art fails to show or suggest discrete signals as set forth by claim 84. Claim 84 sets forth that the first discrete signal includes information for organizing with information included in the second discrete signal to provide an organized signal. The operation of the page store of Millar is relied upon to show this function. There is no suggestion that the page store of Millar organizes information. In applicants' invention, "signals may convey information in discrete words, transmitted at separate times or in separate locations, that the receiver apparatus must assemble in order to receive one complete instruction." Spec. p. 14, Il. 22-25. As the discrete words may be transmitted at various and varying locations, the mere detection of the signal words is insufficient to give meaning to the signal. These signals must be organized into units, such as instructions. Spec. p. 14, Il. 26 - p. 15, l. 6. This organization occurs at buffer/comparator, 8. Spec. p. 30, Il. 7-16 ("Buffer/comparator, 8, receives said signals

from said decoders and other signals from other inputs and organizes the received information in a predetermined fashion.") The Office action asserts that the page store of Millar organizes information from a first discrete teletext data packet of a selected page with information from subsequently received data packets to obtain an entire page of information. Millar discloses, "[t]he page selector 58 simply selects the timing gate position for reading into the store if the page-interlaced organisation is used or sets the field counter as just described if either of the other organisations is used." Millar p. 4, Il. 30-35. Millar fails to suggest that organization occurs at the page store 59. Rather the teletext data is simply stored in the form it is received.

Claim 84 further sets forth that the organized signal instructs the receiver station to generate or output a locally generated image for display coordinated with video. The locally generated image is based on user specific data stored at the receiver station prior to the step of organizing to provide the organized signal. The operation of the character generator 56 of Millar is relied upon to show this function. However, the character generator of Millar does not receive any user specific data and does not generate or output any image based on user specific data. The Office action relies on Marti to show user specific data. The Office action relies on a digital code representing a user's selected page number to show user specific data. A selected page number is not user specific data for the reasons set forth in Section E above. As the code will be the same for each user that selects the particular page of data, the code is not data related to a *particular* user.

Claim 84 sets forth that the locally generated image is for display coordinated with the video. The Office action asserts that it was notoriously well known in the art that a locally generated image is displayed superimposed as an overlay over video. The Office action identifies no art in which a locally generated image based on user specific data is coordinated with video. The Office action refers to lines 9-16 of Millar which sets forth allowing the picture represented by the video signal to be displayed with or without the alphanumeric information. Millar includes no locally generated image based on user specific information that is displayed

coordinated with video. Rather Millar contemplates captions or sub-titles that are not based on user specific data. *See* Millar p. 1, ll. 16-24; p. 2, ll. 79-92.

b. Claims 85, 87 And 183-186

Claims 85, 87 and 183-186 depend from claim 84. In Section E-20 of the Office action, these claims are rejected as being unpatentable over Millar in view of Marti for the same reason as claim 84. These claims are patentable over Millar and Marti for at least the reasons set forth above with respect to claim 84.

Claim 183 sets forth receiving a first control discrete signal and a second control discrete signal at the transmitter station and organizing information included in the first control discrete signal with information included in the second control discrete signal to provide a control signal. The step of transmitting is based on the control signal. The Office action asserts that various discrete control signals are necessarily received and organized by the computer 52 of Millar. There is no such suggestion in Millar. Millar is silent regarding how any control signals are received or processed. It is not necessary that a control signal forming the basis for transmitting video is organized from information included in a first control discrete signal and second control discrete signal as set forth by claim 183.

c. Claim 187

In Section E-21 of the Office action, claim 187 is rejected as being unpatentable over Millar in view of Marti for the same reason as claim 84. It is asserted that the recitations of claim 187 are met by the receiver side circuitry of the applied prior art for the reasons that were discussed with respect to claim 84. Accordingly, claim 187 is patentable over Millar and Marti for the reasons set forth above with respect to claim 84.

Millar and Marti do not suggest a step of organizing information to provide an organized signal. Millar merely stores selected text data as it is received. There is no organization of the text data in the memories of either Millar or Marti for the reasons set forth above with respect to claim 84.

Millar and Marti do not suggest a step of generating an image by processing at least one user specific subscriber datum. Millar and Marti merely address page selection. Page selection numbers are not user specific subscriber data for the reasons set forth above in Section E above. Furthermore, the page selection numbers are used to cause the selected page to be stored in memory. However, claim 187 sets forth a step of generating an image by processing a user specific datum. The Office action fails to demonstrate how Millar or Marti show or suggest generating an image by processing the page selection number.

There is no suggestion in Millar or Marti of a step of outputting a video presentation comprising a video image and a coordinated display using the generated image and the video image. Millar and Marti suggest no coordination between an image generated by processing user specific data and video.

d. Claims 188-191 And 193-196

Claims 188-191 and 193-196 depend from claim 187. In Sections E-21 and E-22 of the Office action, claims 188-191 and 193-196 are rejected as being unpatentable over Millar in view of Marti for the same reason as claim 187. Claims 188-191 and 193-196 are patentable over Millar in view of Marti for at least the reasons discussed above with respect to claim 187.

Claim 188 sets forth that a receiver specific control signal is generated based on a third discrete signal and sets forth selecting the video presentation in response to the generated receiver specific control signal. Claim 189 sets forth controlling a receiver, a switch, a decryptor, a storage device, or a computer based on the receiver specific control signal. The Office action asserts that Marti teaches that a receiver specific control signal is generated, stored, and serves as the basis for selecting the teletext page that is displayed. No support is provided for this assertion other than a reference to figure 7 of Marti. To the contrary, figure 7 of Marti suggests no receiver specific control signals in response to which a video presentation is selected.

Claim 190 sets forth that the third discrete signal of claim 188 includes only partial information of an identifier. The Office action asserts that the page number represents only partial address information. Neither Millar nor Marti includes such teaching or supports this assertion.

Claims 193 and 194 set forth a receiver specific control signal that is processed based on a third discrete signal. Claim 193 sets forth outputting the video image in response to the receiver specific control signal. Claim 194 sets forth that the step of generating is based on the receiver specific control signal. The Office action merely refers to figure 7 of Marti to show these limitations. There is no receiver specific control signal as set forth by applicants' claims depicted in figure 7 of Marti.

e. Claim 80

Claim 80 includes the step of transmitting a signal from an origination transmitter. The signal contains video and an instruct signal which is operative at the receiver station to instruct the receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with the video. Claim 80 further includes the step of transmitting a control signal from the origination transmitter, wherein the control signal is effective at the remote intermediate transmitter station to control the communication of the video and the instruct signal.

In Section E-23 of the Office action, claim 80 is rejected as being unpatentable over Millar in view of Marti for the same reason as claim 84. Claim 80 however sets forth steps of transmitting from an origination station not set forth in claim 84. Millar and Marti fail to suggest these transmitting steps. The Office action merely refers to the following sentence at lines 36-47 of page 1 of Millar: "Another possibility is to superimpose information relating to the source, the routing, and destination of a video signal for display only on monitor screens viewed by producers, programme controllers and such personnel, or for effecting automatic executive

action relating to the signal routing and monitoring." This passage is insufficient to suggest the details of the transmitted signals set forth in claim 80.

Claim 80 sets forth transmitting a signal including video and an instruct signal. The instruct signal functions similarly to the organized signal of claim 84. Millar and Marti fail to suggest transmitting video and such an instruct signal for the reasons set forth above with respect to claim 84.

Claim 80 sets forth transmitting a control signal that is effective at the remote intermediate transmitter station to control communication of the video and the instruct signal to the receiver station. Neither Millar nor Marti suggest any such control signal. There is no control signal suggested in the applied art which controls communication of an instruct signal as claimed.

f. Claim 81

Claim 81 depends from claim 80. Claim 81 is rejected in Section E-23 of the Office action as being unpatentable over Millar in view of Marti for the same reason as claim 80. The Office action does not address the specific limitations of claim 81. Accordingly, the Office action fails to establish a *prima facie* case of obviousness against claim 81. Claim 81 sets forth that the control signal comprises information which identifies a portion of an information transmission. Claim 81 further sets forth transmitting from the origination transmitter a second control signal which facilitates the communication of the portion of the information transmission to the receiver station. No such second control signal is suggested by Millar or Marti.

8. Rejection Based On Diederich And Germany In View Of Chambers

Claims 80 and 81 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the three reference combination of German Patent 23 56 969 to Warner Diederich ("Diederich") in view of British Patent 959,274 listing as inventor Leslie Walter Germany ("Germany") and

further in view of "CEEFAX - The Generation, Distribution and Transmission of a National Teletext Service" by J. P. Chambers ("Chambers").

a. Claim 80

Claim 80 sets forth transmitting a signal from an origination transmitter to a remote intermediate transmitter station. The signal includes video and an instruct signal. The instruct signal is operative at the receiver station to instruct the receiver to generate or output a locally generated portion of a video presentation based on data specific to user of the receiver station for display coordinated with the video.

In Section E-32 of the Office action, claim 80 is rejected as being unpatentable over Diederich and Germany in view of Chambers. The Office action acknowledges that the TV networks of Diederich and Germany fail to teach the claimed instruct signal. Chambers is applied to show this feature. Chambers is a brief description of the British Broadcasting Corporation's CEEFAX teletext distribution service. The Office action merely relies on Chambers to show a national teletext distribution service. However, there is no suggestion that the CEEFAX system includes an instruct signal operative at a receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with the video. There is no suggestion of any video presentation based on data specific to a user of the receiver station for display coordinated with video. There is no suggestion that the teletext in the CEEFAX system includes an instruct signal operative to generate or output such a locally generated portion of such a video presentation.

Claim 80 also sets forth transmitting a control signal from the origination transmitter to the remote intermediate transmitter station. The control signal is effective at the remote intermediate transmitter stations to control the communication of the video and the instruct signal to the receiver station. The Office action relies on Diederich and Germany to show TV distribution systems using cuing signals. However, there is no suggestion that any embedded cue

signal is used to control the transmission of an instruct signal as set forth by claim 80. Diederich and Germany are silent regarding instruct signals.

The Examiner maintains that it would be obvious to have distributed teletext with the distribution systems of Diederich and Germany. This is incorrect. First, even if the distribution systems of Diederich or Germany were used to distribute the CEEFAX material of Chambers, the combination does not suggest using any control signal in Diederich or Germany to control communication of any instruct signal. Second, there is no motivation to combine the teaching of Diederich or Germany with the teaching of Chambers. The Office action asserts that the motivation is the additional revenue that is generated by advertising contained therein. This is an improper, conclusory statement of motivation based on hindsight. Chambers is silent regarding advertising revenue. There is no suggestion in the applied art that the combination of Diederich or Germany with Chambers would increase advertising revenues.

b. Claim 81

Claim 81 depends from claim 80. In Section E-33 of the Office action, claim 81 is rejected as being unpatentable over the three-reference combination of Diederich and Germany in view of Chambers for the same reason as claim 80. Claim 81 is patentable over Diederich, Germany and Chambers for the reasons set forth above with respect to claim 80. Claim 81 sets forth that the control signal comprises information which identifies a portion of an information transmission that includes video. The Office action notes that Germany teaches a visible cuing signal for manual control. It is asserted that this visible cuing signal corresponds to the information recited in the claim. However, the control signal comprises the information as recited in claim 81. There is no suggestion that a control signal comprises the visible cuing signal of Germany. Claim 81 further sets forth the transmission of a second control signal which facilitates the communication of the portion of the information transmission. The Office action relies on the cuing signal of Germany to show this second control signal. However, the cuing signal of Germany is used to show the initial control signal. Germany does not suggest a first

control signal and a second control signal as claimed in claim 81. There is further no suggestion in Germany that any cue signal facilitates the communication of a portion of an information transmission that is identified.

9. Rejection Based On "MODE II" Captioning

Claims 84, 85, 93-95, 98, 100, 107, 184, 185 and 187 are rejected under 35 U.S.C. § 103(a) as being unpatentable over "MODE II" captioning. The rejection of claim 93 is based on "Mode II" captioning as described in the three-reference combination of "Development & Applications of the Antiope-Didon Technology" by J. Guillermin ("Guillermin"), "Antiope Teletext Captioning" by Claude Sechet ("Sechet") and the "CBS/CCETT North American Broadcast Teletext Specification (Extended Antiope)" ("CBS/CCETT Spec."). The rejections of the other claims, although purportedly for the same reason as claim 93, do not include Guillermin.

The rejection of claim 93 upon which all the rejections are based, includes "the Examiner's position concerning the 'State of the Art,'" a description of "The 'MODE II' captioning feature as described by 'prior art,'" and "A Comparison of Applicants' Disclosed Invention and 'MODE II' captioning." Applicants note that the these explanations of the Examiner's understanding of MODE II captioning are not prior art and cannot properly be substituted for actual prior art.

With respect to the CBS/CCETT Spec., applicants submit that the Examiner has failed to establish that the reference qualifies as prior art to the claims of the instant application. The Examiner refers to this document as a "publication" in the Office action. However, the Examiner has not shown that the document was disseminated or otherwise made available to those of ordinary skill in the art at a time that would render the document prior art to the claims of the instant application, in accordance with the requirements of M.P.E.P. Section 2128 and the Federal Circuit authorities cited therein. Although the document's cover page bears a date of May 20, 1981, no showing has been made that the document was disseminated or accessible by

those of ordinary skill in the art by that date. Applicants acknowledge that the CBS/CCETT Spec. was the subject of testimony given in connection with an International Trade Commission investigation involving applicants' related issued patents (*In re Certain Digital Satellite Sys.* (DSS) Receivers & Components Thereof, No. 337-TA-392). However, that testimony also fails to establish when the document was disseminated or accessible (a copy of the transcript of the pertinent testimony is attached hereto at Tab A). Accordingly, applicants respectfully submit that all rejections based on the CBS/CCETT Spec. should be withdrawn, unless the Examiner can establish a publication date for the document that would qualify the reference as prior art. Applicants note, however, that the pending claims are in any event allowable over the various combinations of references that include the CBS/CCETT Spec. for the reasons set forth below.

a. Claim 93

Claim 93 is directed to a method for a receiver station to receive discrete signals that are organized into a complete instruction with a specified effect. In claim 93, the receiver station receives, detects, and passes discrete signals found in an information transmission to a processor. The receiver station organizes the first discrete signal with the second discrete signal into an organized signal. The organized signal is effective to generate an image by processing user specific subscriber data. The user specific data is stored at the receiver station prior to the organizing of the organized signal and is based on information supplied by a user of the receiver station. The result is an outputted presentation of a video image and a coordinated display using the generated image and the video image.

Claim 93 sets forth a step of generating an image in response to an organized signal by processing at least one user specific subscriber datum. The applied art related to ANTIOPE and MODE II captioning does not show or suggest a user specific subscriber datum. The Office action asserts that MODE II captioning requires a specific user input datum that is required to select the language or level of MODE II captioning images. However, these user selections are not user specific subscriber data for the reasons set forth in Section E above. The user selections

are not user specific as every user who chooses to view any given classification and level of captions will input the same data. There is nothing about such data that is related to a particular station or user. Moreover, no image is generated by processing such a user input datum. The CBS/CCETT Spec., at page 138, discloses, "When the caption is to be displayed a simple control packet is sent with caption type designator equal to the caption be displayed along with a reveal bit." Accordingly, the caption is displayed based on processing a received simple control packet. The applied art does not suggest that a user input datum is processed to display the captions as asserted in the Office action.

b. Claims 94, 95, 98, 100, 107, 108 And 187

Claims 94, 95, 98, 100, 107, 108 and 187 are rejected in Section E-35 of the Office action over "MODE II" captioning as described in Sechet and the CBS/CCETT Spec. for the same reasons as set forth for claim 93. These claims are patentable over "MODE II" captioning for the reasons set forth above with respect to claim 93. Claims 94, 95, 98, 100, 107, 108 depend from claim 94 and thus include each step of claim 93. The Office action fails to address the limitations of these claims and, thus, does not establish a *prima facie* case of obviousness against these claims. Claim 187 sets forth a step of generating an image by processing at least one user specific subscriber datum. At least this step is not suggested by "MODE II" captioning for the reasons set forth above with respect to claim 93.

c. Claim 84

In Section E-36 of the Office action, claim 84 is rejected as being unpatentable over "MODE II" captioning as described in Sechet and the CBS/CCETT Spec. for the reasons set forth for claim 93. In the Office action, it is asserted that the discrete signals having the functions set forth by claim 84 are shown by "MODE II" captioning for the reasons set forth with respect to claim 93. To the contrary, claim 84 sets forth an organized signal that instructs the receiver station to generate or output a locally generated image. There are no organized signals suggested by the CBS/CCETT Spec. that instruct a receiver station to generate or output

a locally generated image. The teletext character data of the CBS/CCETT Spec. do not instruct the receiver station to generate or output a locally generated image. Rather, as noted in the Office action, there is a reveal code that instructs the caption to be displayed. In fact, the CBS/CCETT Spec. states that a simple control packet is sent that includes a reveal bit. There is no suggestion that this control packet is organized from information from different discrete signals.

In section E-41 of the Office action, claim 84 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the "Mode II" captioning application of teletext as described in the CBS/CCETT Spec. The Office action merely asserts that all of the recited steps are met by operations that were necessarily performed by all conventional TV stations that functioned to embed and transmit packets of a standard teletext service. Although the Examiner described his understanding of "conventional" teletext, the rejection includes no explanation of where the claimed steps are found in the prior art. Accordingly, this rejection is improper.

d. Claims 85, 184 And 185

Claims 85, 184 and 185 depend from claim 84. In Section E-42 of the Office action, these claims are rejected as being unpatentable over "Mode II" captioning for the same reasons that were set forth for claim 84. The Office action fails to address the specific limitations of claims 85, 184 and 185 and, thus, fails to establish a *prima facie* case of obviousness against these claims. These claims are patentable over "Mode II" captioning for at least the reasons set forth above with respect to claim 84.

10. Rejections Based On Young, Tunmann And Bart Or The CBS/CCETT Spec.

In Section E-37 of the Office action, claim 80 is rejected under 35 U.S.C. § 103(a) as being unpatentable over conventional TV system configurations in view of the three-reference combination of "The Automation of Small Television Stations" by George Young, et al. ("Young"), "Microprocessor for CATV Systems" by E.O. Tunmann, et al. ("Tunmann") and

Bart. In Section E-38 of the Office action, claim 80 is rejected under 35 U.S.C. § 103(a) as being unpatentable over conventional TV system configurations in view of the three reference combination of Young, Tunmann, and the CBS/CCETT Spec.

These two rejections are similar and both are improper. The Office action merely asserts that claim 80 pertains to a TV distribution system of conventional design. Applicants submit that claim 80 is not merely directed to a TV distribution system of conventional design, but rather relates to a method of controlling a video presentation at a receiver station by transmitting signals not shown or suggested in the applied art.

The Office action erroneously states that the patentability of claim 80 rests on the novelty or non-obviousness of one of the recited transmitting steps. The Office action concludes that neither transmitting step is non-obvious. It is asserted that Young and Tunmann show the desirability of automating networks by transmitting control signals. It is further asserted that conventional teletext systems were known to have comprised different instruct signals. This reasoning is improper and insufficient to establish non-obviousness under § 103. "The question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious." M.P.E.P. § 2141.02 (citing Statoflex, Inc. v. Aeroquip Corp., 713 F.2d 1530, 218 U.S.P.Q. 871 (Fed. Cir. 1983)). As all inventions are new combinations of old elements, a proper rejection under Section 103(a) is not established merely by asserting that individual elements are found in "conventional" systems described by the Examiner. The Examiner must show that the elements are shown or suggested by actual prior art, and present an explanation why the prior art would motivate one of ordinary skill to combine the elements. This analysis is wholly lacking from these two rejections of claim 80.

Claim 80 sets forth transmitting a control signal that is effective at a remote intermediate transmitter station to control communication of video and an instruct signal to a receiver station. The Office action merely asserts that transmitting control signals is old. However, the Office

action fails to explain how the prior art shows or suggests a control signal that is effective to control the communication of an instruct signal to a receiver station as set forth by claim 80.

Furthermore, claim 80 sets forth transmitting a signal including the video and the instruct signal. The instruct signal is operative at the receiver station to instruct the receiver station to generate or output a locally generated portion of the video presentation based on data specific to a user of the receiver station for display coordinated with the video. No such instruct signal is suggested by the applied art. The Office action merely asserts that teletext includes instruct signals. In the first rejection, Bart is relied upon to show the display of teletext. In the second rejection, the "MODE II" captioning feature of the CBS/CCETT Spec. is relied upon to show teletext. Neither reference suggests an instruct signal that instructs a receiver station to generate or output a locally generated portion of the video presentation based on data specific to a user for display coordinated with the video.

In Section E-39, claim 80 is further rejected under 35 U.S.C. § 103(a) as being unpatentable over Young in view of the conventional Teletext broadcast service that was described within the CBS/CCETT Spec. The Examiner takes Official Notice that it was notoriously well known in the TV art for Network TV stations to have provided an embedded Teletext data service within the VBI of their transmitted network TV programming. The Examiner goes on to describe his understanding of the CBS/CCETT proposed system. Should the Examiner be asserting through Official Notice that it was known to include all the features of the CBS/CCETT system in network TV stations, applicants traverse such Official notice. The CBS/CCETT specification speaks for itself. Applicants do not concede that all of features in the CBS/CCETT specification were *notoriously* well known in the art at the time the invention was made. To the contrary as noted above, there is no showing that the CBS/CCETT specification qualifies as prior art in accordance with the requirements of MPEP Section 2128.

Claim 80 sets forth transmitting a control signal that is effective at a remote intermediate transmitter station to control communication of video and an instruct signal to a receiver station. Young is relied upon to show transmitting control signals. However, there is no teaching in

Young of a control signal that is effective to control the communication of an instruct signal to a receiver station as set forth by claim 80.

Claim 80 also sets forth transmitting a signal including the video and the instruct signal. The instruct signal is operative at the receiver station to instruct the receiver station to generate or output a locally generated portion of the video presentation based on data specific to a user of the receiver station for display coordinated with the video. The CBS/CCETT Spec. is relied upon to show an instruct signal. The Office action appears to rely on the reveal bit to show the instruct signal. There is no suggestion in the applied art that the reveal bit of the CBS/CCETT Spec. is provided from a first discrete signal including information for organizing with information included in a second discrete signal as set forth in claim 80. Furthermore, the instruct signal instructs the receiver station to generate or output a locally generated image for display coordinated with video. The locally generated image is based on user specific data. The Office action relies on caption level selections to show user specific data. These selections are not data specific to a user of the receiver station for the reasons set forth in Section E above. The caption levels are initially defined by the system not the user. Each user that desires to view the same level will use the same level identifier. Accordingly, the captioning level is not data related to a particular user.

In section E-40 of the Office action, claim 81 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Young in view of the conventional Teletext broadcast service that was described within the CBS/CCETT Spec. for the same reasons set forth for claim 80. Claim 81 depends from claim 80 and is patentable in view of Young and the CBS/CCETT Spec. for at least the reasons set forth above.

Claim 81 sets forth a second control signal that facilitates the communication of a portion of an information transmission that is identified with information included in the initial control signal. The Examiner merely "takes Official Notice that it was notoriously well known in the TV broadcast art for the network stations to have embedded all sorts of control signals within the network programming." Applicants traverse this Official Notice. The Examiner has failed to

identify any suggestion of a second control signal that functions as set forth in claim 81. Should the Examiner maintain that such a control signal was known, applicants request that the Examiner produce actual prior art that suggests such a control signal.

H. Response To Double Patenting Rejection

In Section E-43, the Examiner rejects claims 56-58, 60-63, 65-74, 89-91, 93-95, 98, 100, 102, and 187-197 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 9-13 of U.S. Patent No. 4,694,490 (the "490 patent"). The '490 patent and the instant application share common inventors.

In determining whether obviousness-type double patenting exists the relevant inquiry is whether the claim or claims pending in the current application define an invention that is merely an obvious variation of an invention claimed the issued patent. M.P.E.P. § 804. A rejection based on obviousness-type double patenting must demonstrate that the claimed subject matter is not patentably distinct from the subject matter claimed in the issued patent. *See In re Longi*, 759 F.2d 887, 225 U.S.P.Q. 645 (Fed. Cir. 1985). The M.P.E.P. instructs examiners to employ the *Graham* factors, *see Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966), used to establish a case of obviousness when making an obviousness-type double patenting analysis. M.P.E.P. § 804. Further, the M.P.E.P. instructs examiners that:

Any obviousness-type double patenting rejection should make clear:

- (A) The differences between the inventions defined by the conflicting claims a claim in the patent compared to a claim in the application; and
- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

M.P.E.P. § 804; see also In re Kaplan, 789 F.2d 1574, 229 U.S.P.Q. 1574 (Fed. Cir. 1986) (to support an obviousness-type double patenting rejection "there must be some clear evidence to establish why the variation would have been obvious").

68

The Examiner's obviousness-type double patenting rejection fails to discuss any *Graham* factors and fails to identify any differences between the pending claims and the claims in the '490 patent and the reasons why a person of ordinary skill in the art would conclude that the inventions defined in the pending claims are merely obvious variations of the inventions claimed in the claims of the '490 patent. Accordingly, the Examiner has not made out a *prima facie* case of obviousness-type double patenting.

The Examiner's double patenting rejection essentially consists of an assertion that the instant claims and claims 9-13 of the '490 patent define obvious variants of the same invention because they rely on the same written description support in applicants' 1981 specification (i.e., the Wall Street Week example). Without any analysis whatsoever, the Examiner asserts that:

while [the pending] claims of the instant application positively recite steps which are not explicitly recited in claims 9-13 of [the '490 patent], it appears that these recited steps are implicit in the recited means of the patented claims given the limited 1981 disclosures. This position also seems to be supported by the fact that, in responding to the section 120 priority issue, applicants often argue that while recitations of the instant claims find explicit support in the 1987 specification, they find implicit support in the 1981 parent specification (i.e., that the processing that is described in the 1981 parent specification implicitly comprised ones of the currently recited steps. Obviously, to the extent that the claims 9-13 recite this same described 1981 processing, the recitations also include the same alleged implicit steps.

Office action, p. 128. Notwithstanding the fact that the Examiner's assertions fail to make out a *prima facie* case of obviousness-type double patenting, the Examiner's position is untenable because he improperly reads functions not actually recited into claims 9-13 of the '490 patent.

The Examiner acknowledges that the instant claims recite steps that are not found in claims 9-13 of the '490 patent, but the Examiner does not allege that the instant claims define inventions that are obvious variations of the inventions defined by claims 9-13 of the '490 patent. Instead, the Examiner simply asserts that the steps of the instant claims are "implicit" in claims 9-13 of the '490 patent because such steps are described in applicants' 1981 specification.

The M.P.E.P., however, cautions examiners from doing precisely what the Examiner has done in Section E-43 of the Office action. The M.P.E.P. instructs examiners that in determining whether a pending claim defines an invention that is an obvious variation of an invention claimed in an issued patent, the specification of the issued patent cannot be used as prior art.

M.P.E.P. § 804. The obviousness analysis is limited solely to *inventions defined by the* claims. Of course, in determining whether the claimed invention is an obvious variant of that defined by the issued claim, relevant portions of the specification can be used to ascertain the scope and meaning of an issued claim. *See In re Vogel*, 422 F.2d 438, 164 U.S.P.Q. 619 (C.C.P.A. 1970). It is, however, improper to read limitations from the specification into the claims of the issued patent. *See e.g.*, Donner, Irah H., *Patent Prosecution: Practice & Procedure Before the U.S. Patent Office*, Ch.10.VIII.B.1 (2nd ed. 1999) (discussing *In re Vogel* and noting "[t]hus whereas the patent disclosure may be used to interpret claims, the Examiner may not read the specification into the claims in an effort to buttress a double-patenting rejection).

The Examiner's reliance on the fact that claims 9-13 of the '490 patent are written in means-plus-function format does not support his position. While the proper claim construction of a means-plus-function claim dictates that the claim shall be construed to cover the corresponding structure, material, or acts described in the specification, *see In re Donaldson Co.*, 16 F.3d 1189, 29 U.S.P.Q.2d 1845 (Fed. Cir. 1994), the Examiner improperly reads entire functions from the specification into the claims of the '490 patent.⁵ Even though claims 9-13 of the '490 patent are written in means-plus-function format, it is improper to incorporate the allegedly "implicit" functions described in applicants' 1981 specification into claims 9-13 when conducting the requisite analysis for an obviousness-type double patenting rejection.

As discussed above, the Examiner acknowledges that the pending claims of the instant application contain numerous steps and other limitations which are not found in the inventions

⁵ Applicants note that while acts described in a specification may properly be incorporated into a step-plus-function claim, the claims of the '490 patent are apparatus claims written in means-plus-function format — not step-plus-function format.

defined by claims 9-13 of the '490 patent. For example, none of claims 9-13 of the '490 patent explicitly or implicitly include the step (included in independent claim 56) of contacting a remote data source and receiving remotely originated data from the remote data source. Claims 9-13 of the '490 patent also do not explicitly or implicitly include the step (included in independent claim 80) of transmitting signals from an origination station to an intermediate transmitter station. Claims 9-13 of the '490 patent do not explicitly or implicitly include the step (included in independent claim 84) of receiving and transmitting a first and second discrete signal from a transmitter station, where the first signal includes information for organizing with information in the second signal to provide an organized signal. Finally, claims 9-13 of the '490 patent also do not explicitly or implicitly include the step (included in independent claims 93 and 187) of organizing information included in a first discrete signal with information in a second discrete signal to provide an organized signal. While the foregoing are only illustrative examples, it is clear that the inventions defined in the pending claims are not merely obvious variations of the inventions claimed in claims 9-13 of the '490 patent. Accordingly, applicants respectfully request that the Examiner withdraw the obviousness-type double patenting rejection of the pending claims.

III. CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Reconsideration and allowance of the instant application are respectfully requested.

Respectfully submitted,

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